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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,946	06/13/2005	Marcus Schorpp	915-005.138	7244
4955 7590 06/28/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER STULTZ, JESSICA T	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/517,946	SCHORPP, MARCUS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jessica T. Stultz	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1204.0205</u>   | 6) <input type="checkbox"/> Other: ____                           |

**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-2, 4, 12-14, and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 and 8-10 of copending Application No. 10/568,310, herein referred to as Schorpp '310. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-2, 4, 12-14, and 16 of the instant application are anticipated or made obvious by claims 1-2 and 8-10 of Schorpp '310.

Regarding claim 1, Schorpp '310 discloses the limitations therein (Claims 1-2).

Regarding claim 2, Schorpp '310 discloses the limitations therein (Claims 1-2 and 8).

Regarding claim 4, Schorpp '310 discloses the limitations therein (Claims 1-2 and 9).

Regarding claim 12, Schorpp '310 discloses the limitations therein (Claims 1-2 and 10).

Regarding claim 13, Schorpp '310 discloses the limitations therein (Claims 1-2 and 10).

Regarding claim 14, Schorpp '310 discloses the limitations therein (Claims 1-2 and 8).

Regarding claim 16, Schorpp '310 discloses the limitations therein (Claims 1-2 and 9).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Guscho WO 01/48531, herein referred to as Guscho '531.

Regarding claim 1, Guscho '531 discloses an electrically controlled light modulator device comprising at least one cell, said cell comprising at least two deformable dielectric layers which meet at an interface (Abstract), at least one of said layers consisting of viscoelastic relief forming gel (Abstract and Pages 49-50, wherein the viscoelastic gel is "5", Figures 22a-b), a first support electrode structure arranged on one side of the dielectric layers (Abstract and Pages 49-50, wherein the support electrode is "6", Figures 22a-b), a second signal electrode structure arranged on the other side of the dielectric layers and opposite to the support electrode structure (Pages 49-50, wherein the second signal electrode comprises one of the signal electrodes "42", Figures 22a-b) and signal means for applying signal voltage between the support (Figures 22a-b, "41") and signal electrode structures to generate electric field passing through the two deformable dielectric layers in order to create surface reliefs on the viscoelastic gel layer (Figures 22a-b, "42"), a third enhancement electrode structure composed of one or more separate electrode zones arranged in the proximity of the first signal electrode structure (Figures 22a-b, wherein the electrode zones are additional electrodes "42"), and enhancement signal means for applying enhancement signal voltage between the enhancement electrode structure (Figures 22a-b, "41") and the signal electrode structure ("42") in order to locally concentrate the electric field passing through the two deformable dielectric layers and therefore arranged to enhance the amplitude of the deformation of the viscoelastic gel layer (Pages 49-50, Figures 22a-b).

Regarding claim 5, Guscho '531 further discloses that the enhancement signal voltage is arranged to be negative compared to potential defined by the support electrode structure (Page 40, 49-50, and 79, wherein the electrodes "42" provide voltage opposite and thereby negative to the support electrode "6", Figures 22a-b).

Regarding claim 7, Guscho '531 further discloses that the said enhancement electrode structure is an opaque structure (Figures 22a-b) lithographically generated on the surface of a conductor plated substrate (Page 54).

Regarding claim 9, Guscho '531 further discloses that the electrically insulating layer ("2") is arranged on one or both sides of said enhancement electrode structure (Figures 22a-b, "42").

Regarding claims 10-11, Guscho '531 further discloses that the material of the viscoelastic relief forming gel is selected from the following group: polymer silicone compound, oil and thereby has a lower elastic modulus as claimed (Abstract).

Regarding claim 12, Guscho '531 further discloses that multiple cells are arranged to form a display device (Figure 17).

Regarding claim 13, Guscho '531 discloses a display device comprising a plurality of electrically controlled light modulator devices (Figure 17), said light modulator devices comprising at least one cell (Abstract), said cell comprising at least two deformable dielectric layers which meet at an interface (Abstract), at least one of said layers consisting of viscoelastic relief forming gel, (Abstract and Pages 49-50, wherein the viscoelastic gel is "5", Figures 22a-b), a first support electrode structure arranged on one side of the dielectric layers (Abstract and Pages 49-50, wherein the support electrode is "6" Figures 22a-b), a second signal electrode structure arranged on the other side of the dielectric layers and opposite to the support electrode structure (Pages 49-50, wherein the second signal electrode comprises one of the signal electrodes "42", Figures 22a-b) and signal means for applying signal voltage between the support (Figures 22a-b, "41") and signal electrode structures to generate electric field passing through the

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two deformable dielectric layers in order to create surface reliefs on the viscoelastic gel layer (Figures 22a-b, "42"), a third enhancement electrode structure composed of one or more separate electrode zones arranged in the proximity of the first signal electrode structure (Figures 22a-b, wherein the electrode zones are additional electrodes "42"), and enhancement signal means for applying enhancement signal voltage between the enhancement electrode structure (Figures 22a-b, "41") and the signal electrode structure ("42") in order to locally concentrate the electric field passing through the two deformable dielectric layers and therefore arranged to enhance the amplitude of the deformation of the viscoelastic gel layer (Pages 49-50, Figures 22a-b).

Regarding claims 2 and 14, Guscho '531 further discloses that within a cell the enhancement electrode structure and the signal electrode structure are arranged substantially in a single common plane respect to each other and facing the opposite support electrode structure (Figures 22a-b, wherein the enhancement electrode and signal electrodes "42" are in a common plane opposite support electrode "6")

Regarding claims 3 and 15, Guscho '531 further discloses that within a cell the electrode zones of the signal electrode structure and the electrode zones of the enhancement electrode structure are positioned in an alternating manner so that an individual signal electrode zone is located between at least two adjacent enhancement electrode zones. (Figures 22a-b, wherein the enhancement electrode and signal electrodes "42" alternate as claimed).

Regarding claims 4 and 16, Guscho '531 further discloses that within a cell the enhancement electrode structure ("16") and the signal electrode structure ("42") are arranged in substantially different planes with respect to each other and with respect to the opposite support electrode (Figure 49, "6").

Regarding claims 6 and 18, Guscho '531 further discloses that the enhancement signal voltage is arranged to be pulsed during or after the switching off period of said cell in order to actively enhance the relaxation of the viscoelastic gel layer (Pages 47-48).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guscho '531, as applied to independent claims 1 and 13 above.

Regarding claims 8 and 17, Guscho '531 disclose a light modulator device as shown above including enhancement electrodes, but does not specifically disclose that the electrodes are made of indium tin oxide. However it is well known in the art of light modulator devices for the electrodes to be made of indium tin oxide for the purpose of providing electrodes with good electrical conductivity. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made for the electrodes of the light modulator device of Guscho '531 to be made of indium tin oxide since it is well known in the art of light modulator devices for the electrodes to be made of indium tin oxide for the purpose of providing electrodes with good electrical conductivity.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schrader US 6,903,872 is cited since it reads on at least independent claim 1 for



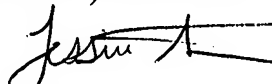
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disclosing a light modulator as claimed, however, it not used in the above rejections since multiple rejections would be repetitious. Glenn US 4,626,920 and Engle US 5,623,361 are cited since they disclose light modulator devices including deformable gel layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T. Stultz whose telephone number is (571) 272-2429. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jessica T Stultz  
Examiner  
Art Unit 2873  
June 25, 2007